CROSS REFERENCE TO RELATED APPLICATION

The following application is a Divisional Application of U.S.

Patent Application 10/229,466, filed August 28, 2002, which claims priority to U.S. Provisional Application 60/315,683, filed August 29, 2001.

IN THE CLAIMS

Please cancel claims 1-20, and substitute the following new claims 21-40 therefor.

--21. (New) A compound represented by the structural formula I

$$R^{1}$$
 N
 R^{10}
 R^{10}
 R^{10}
 R^{10}
 R^{10}
 R^{10}
 R^{10}
 R^{10}
 R^{10}

or a pharmaceutically acceptable salt or solvate thereof; wherein: R¹ is

R² is selected from the group consisting of H, alkyl, aryl, arylalkyl, heteroarylalkyl, alkylketone, arylketone, alkyl, haloalkyl, cycloalkyl, cycloheteroalkyl, cycloalkylalkyl, alkylsulfonyl, arylsulfonyl, alkoxyalkyl, or amide;

R³ is selected from the group consisting of aryl, 6-membered heteroaryl, fluorenyl; and diphenylmethyl, 6 membered heteroaryl-N-oxide,

diphenyl or heteroaryl is optionally substituted with 1-4 substituents which can be the same or different and are independently selected from the group consisting of R¹¹, R¹², R¹³, R¹⁴ and R¹⁵;

 R^4 is 1-3 substituents selected from the group consisting of cycloheteroalkyl, -C(O)C₃-C₈cycloalkyl, -C(O)C₃-C₈cycloheteroalkyl, -(C₁-C₆)alkyl-N(R²¹)SO₂R²², -(C₁-C₆)alkyl-C(O)NR²⁰R²¹, -C(O)-(C₁-C₆)alkyl, R⁸-aryl-C(O)-, -C(O)N(H)OH, -(C₁-C₆)alkyl-N(R²¹)C(O)R²², -(C₁-C₆)alkyl-N(R²¹)C(O)NR²¹R²², -(C₁-C₆)alkyl-NR²¹R²², -(C₁-C₆)alkyl-NR²¹R²², and -SO₂NR²¹R²², wherein R⁴ can be the same or different and is independently selected when there is more than one R⁴ present:

 R^5 is selected from the group consisting of H, arylalkyl, (C₁-C₆)alkyl, R^8 -aryl(C₁-C₆)alkyl-, R^8 -heteroaryl(C₁-C₆)alkyl-, $-SO_2$ -(C₁-C₆)alkyl, $-SO_2$ -aryl, R^8 -aryl- SO_2 -, -C(O)-(C₁-C₆)alkyl, -C(O)-(C₄-C₆)cycloalkyl, R^8 -aryl-C(O)-, $-C(O)NR^{21}R^{22}$, and $-SO_2NR^{21}R^{22}$;

 R^6 is H, -(C₁-C₆)alkyl, or -(C₁-C₆)haloalkyl;

R⁷ is selected from the group consisting of aryl, substituted aryl, heteroaryl, alkyl, haloalkyl and cycloalkyl;

 R^8 is 1, 2 or 3 substituents selected from the group consisting of H, halo, (C₁-C₆)alkyl, (C₁-C₆)alkoxy, -CF₃, -OCF₃, CH₃C(O)-, -CN, CH₃SO₂-, CF₃SO₂- and -NH₂, wherein R^8 can be the same or different and is independently selected when there are more than one R^8 present;

 R^9 , R^{10} and B can be the same or different and are each independently selected from the group consisting of hydrogen, (C₁-C₆)alkyl, and -(C₁-C₆)haloalkyl;

 R^{11} and R^{12} can be the same or different and are each independently selected from the group consisting of (C₁-C₆)alkyl, -(C₁-C₆)haloalkyl, halogen, -NR¹⁹R²⁰, -OH, CF₃, -OCH₃, -O-acyl, and -OCF₃;

 R^{13} is selected from the group consisting of hydrogen, R^{11} , H, phenyl, -NO2, -CN, -CH2F, -CHF2, -CHO, -CH=NOR19, pyridyl-N-oxide, pyrimidinyl, pyrazinyl, $N(R_{20})CONR_{20}R_{21}$, -NHCONH(chloro-(C1-C6)alkyl), -NHCONH((C3-C10)-cycloalkyl(C1-C6)alkyl), -NHCO(C1-C6)alkyl, -NHCOCF3, -NHCOCF3, -NHSO2N((C1-C6)alkyl)2, -NHSO2(C1-C6)alkyl, -N(SO2CF3)2, -NHCO2(C1-C6)alkyl, (C3-C10)cycloalkyl, -SR^{22}, -SOR^{22}, -SO2R^{22}, -SO2NH(C1-C6)alkyl), -OSO2(C1-C6)alkyl, -OSO2(C1-C6)alkyl, -CONR^{19}R^{20}, -CON(CH2CH2-O-CH3)2, -OCONH(C1-C6)alkyl, -CO2R19, -Si(CH3)3 and -B(OC(CH3)2)2;

 R^{14} is selected from the group consisting of (C₁-C₆)alkyl, -(C₁-C₆)haloalkyl -NH₂ and R^{15} -phenyl;

 R^{15} is 1-3 substituents selected from the group consisting of hydrogen, (C₁-C₆)alkyl, -(C₁-C₆)haloalkyl, -CF₃, -CO₂R²⁰, -CN, (C₁-C₆)alkoxy and halogen; wherein R^{15} can be the same or different and is independently selected when there are more than one R^{15} present;

 R^{16} and R^{17} can each be the same or different and are each independently selected from the group consisting of hydrogen and (C_1 - C_6)alkyl, or

R¹⁶ and R¹⁷ together are a C₂-C₅ alkylene group and with the carbon to which they are attached from a spiro ring of 3 to 6 carbon atoms;

 R^{19} , R^{20} and R^{21} can each be the same or different and are each independently selected from the group consisting of H, (C₁-C₆)alkyl and (C₃-C₆)cycloalkyl;

 R^{22} is selected from the group consisting of (C₁-C₆)alkyl, -(C₁-C₆)haloalkyl, (C₂-C₆)hydroxyalkyl, (C₂-C₆)alkylene, (C₃-C₆)cycloalkyl, aryl and aryl(C₁-C₆)alkyl-;

A is selected from the group consisting of H, (C_1-C_6) alkyl, and (C_2-C_6) alkenyl.

M is aryl or heteroaryl optionally substituted with R⁴; and Q is CH or N, with the following proviso:

when R^1 is phenyl, pyridyl, thiophenyl or naphthyl, R^2 cannot be H, -(C₁-C₆)alkyl or -C(O)-(C₁-C₆)alkyl.

22. (New) A compound having the structural formula I according to claim 21 wherein R^9 , R^{10} and B are H, A is -CH₃, and R^1 , R^2 and R^3 are as defined in the following table:

#	R ¹	R ²	R ³
	CI		Z Z
2	ON NOTE		N N
3	CI		Z Z
4			N N
5	CI O S N		N N N
6	CI CI		N N
7	O N Zi		N N N
45			N N N N N N N N N N N N N N N N N N N
47	MeSO ₂ N		N N N
48	MeSO ₂ N Bn		N N N

49	Ac N	Z Z
54	NH NH	Z Z
55	H ₂ N	Z Z
56		Z Z
57	CF ₃ CH ₂ S N	Z
64	HO N T	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
112	O=S=O	N N N
113	O=\$=O CH ₃	Z Z

23. (New) A compound according to claim 22 wherein R¹, R² and R³ each represent:

#	R ¹	R ²	R ³
	CI		,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
2	ONN CH₃ SNO		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
6	CI CI		N N
47	MeSO ₂ `NH		N N
49	Ac N H		N N
56	O ZII		N N
57	CF ₃ CH ₂ S N		N N

24. (New) A compound according to claim 23 represented by the structural formulae:

- 25. (New) A pharmaceutical composition comprising one or more compounds of claim 21.
- 26. (New) A pharmaceutical composition comprising one or more compounds of claim 24.
- 27. (New) The pharmaceutical composition according to claim 25 further comprising one or more pharmaceutically acceptable carriers.
- 28. (New) The pharmaceutical composition according to claim 26 further comprising one or more pharmaceutically acceptable carriers.
- 29. (New) The pharmaceutical composition according to claim 25, wherein said pharmaceutical composition contains a therapeutically effective amount of said one or more compounds.

- 30. (New) The pharmaceutical composition according to claim 26, wherein said pharmaceutical composition contains a therapeutically effective amount of said one or more compounds.
- 31. (New) A method of treating Human Immunodeficiency Virus comprising administering to a patient in need of such treatment a therapeutically effective amount of one or more compounds according to claim 21.
- 32. (New) A method of treating Human Immunodeficiency Virus comprising administering to a patient in need of such treatment a therapeutically effective amount of one or more compounds according to claim 24.
- 33. (New) A method of treating Human Immunodeficiency Virus comprising administering the pharmaceutical composition of claim 25.
- 34. (New) The method of claim 32 further comprising administering one or more antiviral or other agents useful in the treatment of Human Immuno-deficiency Virus.
- 35. (New) The method of claim 34 wherein said antiviral agent is selected from the group consisting of nucleoside reverse transcriptase inhibitors, non-nucleoside reverse transcriptase inhibitors and protease inhibitors.
- 36. (New) The method of claim 34 wherein said antiviral agent is selected from the group consisting of zidovudine, lamivudine, zalcitabine, didanosine, stavudine, abacavir, adefovir dipivoxil, lobucavir, BCH-10652, emitricitabine, beta-L-FD4, DAPD, lodenosine, nevirapine, delaviridine, efavirenz, PNU-142721, AG-1549, MKC-442, (+)-calanolide A and B, saquinavir, indinavir, ritonavir, nelfinavir, lasinavir, DMP-450, BMS-2322623, ABT-378, amprenavir, hydroxyurea, ribavirin, IL-2, IL-12, pentafuside, Yissum No. 11607 and AG-1549.

- 37. (New) A method of treating solid organ transplant rejection, graft v. host disease, arthritis, rheumatoid arthritis, inflammatory bowel disease, atopic dermatitis, psoriasis, asthma, allergies or multiple sclerosis comprising administering to a patient in need of such treatment a therapeutically effective amount of one or more compounds of claim 21
- 38. (New) The method of claim 37 for treating solid organ transplant rejection, graft v. host disease, rheumatoid arthritis, inflammatory bowel disease or multiple sclerosis further comprising administering said one or more compounds in combination with one or more pharmaceutically acceptable carriers.
- 39. (New) The method of claim 37 for treating solid organ transplant rejection, graft v. host disease, rheumatoid arthritis, inflammatory bowel disease or multiple sclerosis further comprising administering one or more other agents useful in the treatment of said diseases.
- 40. (New) A kit comprising in separate containers in a single package pharmaceutical compositions for use in combination to treat Human Immunodeficiency Virus which comprises in one container a pharmaceutical composition comprising one or more compounds of claim 21 in one or more pharmaceutically acceptable carriers, and in separate container, one or more pharmaceutical compositions comprising one or more antiviral or other agents useful in the treatment of Human Immunodeficiency Virus in one or more pharmaceutically acceptable carriers.--

REMARKS

Application 10/229,466 is currently pending. No substantive office action has issued yet on the case.

By way of this Preliminary Amendment, Applicants have cancelled claims 1-20 and replaced them with new claims 21-40. Support for the newly added claims can be found in the original claims as filed as well as in various